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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,417	03/20/2001	Hong You Wang	1796-157	9527
6449	7590	08/11/2004	EXAMINER	
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			SHAKERI, HADI	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/811,417	WANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hadi Shakeri	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10 and 15 is/are allowed.
- 6) ☒ Claim(s) 13, 14, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-8, 12 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 3723

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

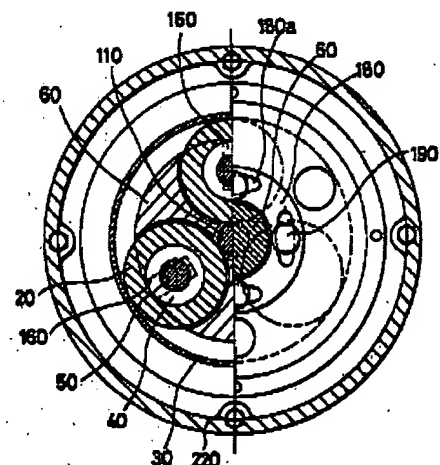
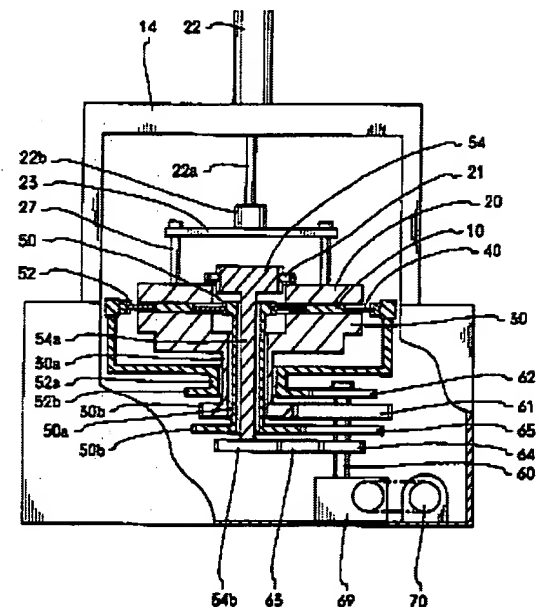
1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16, 13, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of Takahashi et al.

Nakamura et al. meets all the limitations of claim 16, i.e., a polishing device comprising a table provided with hollow space beneath the central portion of the table; a reduction gear type driving said table (e.g., 30), and a driving motor (70) coupled with the reduction gear and disposed offset from the central rotational axis of the table, except for the type of reduction gear system, i.e., traction drive type.

Takahashi et al. teaches planetary roller transmission for transferring power from one rotary shaft to another specifically designed to replace planetary reduction gear system which is easy to assemble and disassemble, can be built at low cost, attains uniform contact pressure that meets the all load conditions and has great durability, said system comprising a center, an externally contacting shaft (110) arranged at said center, a plurality of intermediate shafts



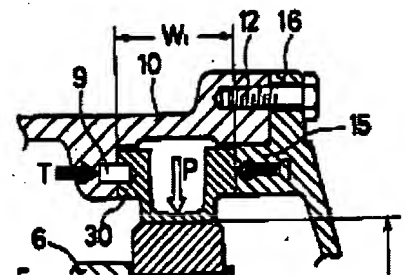
Art Unit: 3723

disposed equidistantly at a circumference of the externally contacting shaft (20), said intermediate shafts externally contacting the externally contacting shaft; and an internally contacting cylinder (30) with which the intermediate shafts internally contact and which is formed in a co-axially arranged hollow ring, e.g., (30) (220) or (30) with frame (10) as in Fig. 3.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of Nakamura et al. with reduction gear as taught by Takahashi et al. to improve the transmission of power, (Takahashi et al., cols. 1 and 2).

Regarding claims 13 and 14, Nakamura et al. as modified by Takahashi et al. meets the limitations, i.e., input shaft (110) and polishing table (30).

Regarding claim 18, Nakamura et al. as modified by Takahashi et al. meets the limitations, i.e., (30) with frame (10).



### ***Allowable Subject Matter***

3. Claims 9, 10 and 15 are allowed.
4. Claims 12 and 2-8 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter: although selecting one of intermediate shafts or a carrier rotatably supporting the intermediate shafts to be an input shaft and/or a hollow output shaft forming co-axially arranged double rings with the internally contacting cylinder, may be within the knowledge of one of ordinary skill in the art, lacking motivation or suggestion by prior art, such modification is considered by the Examiner as hindsight, thus the embodiment wherein at least one of the intermediate shafts or

Art Unit: 3723

the carrier is an input shaft as recited in claims 12 and 8; and wherein an output shaft and the internally contacting cylinder are arranged as co-axially double hollow rings, as recited in claim 17, places these claims objectionable as having allowable subject matter over prior art of record.

### ***Response to Arguments***

6. Applicant's arguments filed 05/06/04 have been fully considered but they are not persuasive. In response to applicant's argument with respect to claim 16 that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Takahashi et al. teaches improvements in a planetary roller transmission for transmitting power for among other advantages reduces manufacturing cost, col. 1, line 43, specifically directed to replacing the conventional reduction gear system as used in Nakamura for reasons, or benefits as indicated. The argument that Nakamura is complete in itself negatives the need for improvements. It is also noted that the teaching reference does not limit itself to any particular apparatus or application, thus following the Applicant's logic, this US Patent cannot be used to modify any apparatus. This argument is not persuasive.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is 703-308-6279. The examiner can normally be reached on Monday-Thursday.

Art Unit: 3723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail, III can be reached on 703-308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hadi Shakeri', with a stylized flourish at the end.

Hadi Shakeri  
Primary Examiner  
Art Unit 3723  
August 6, 2004